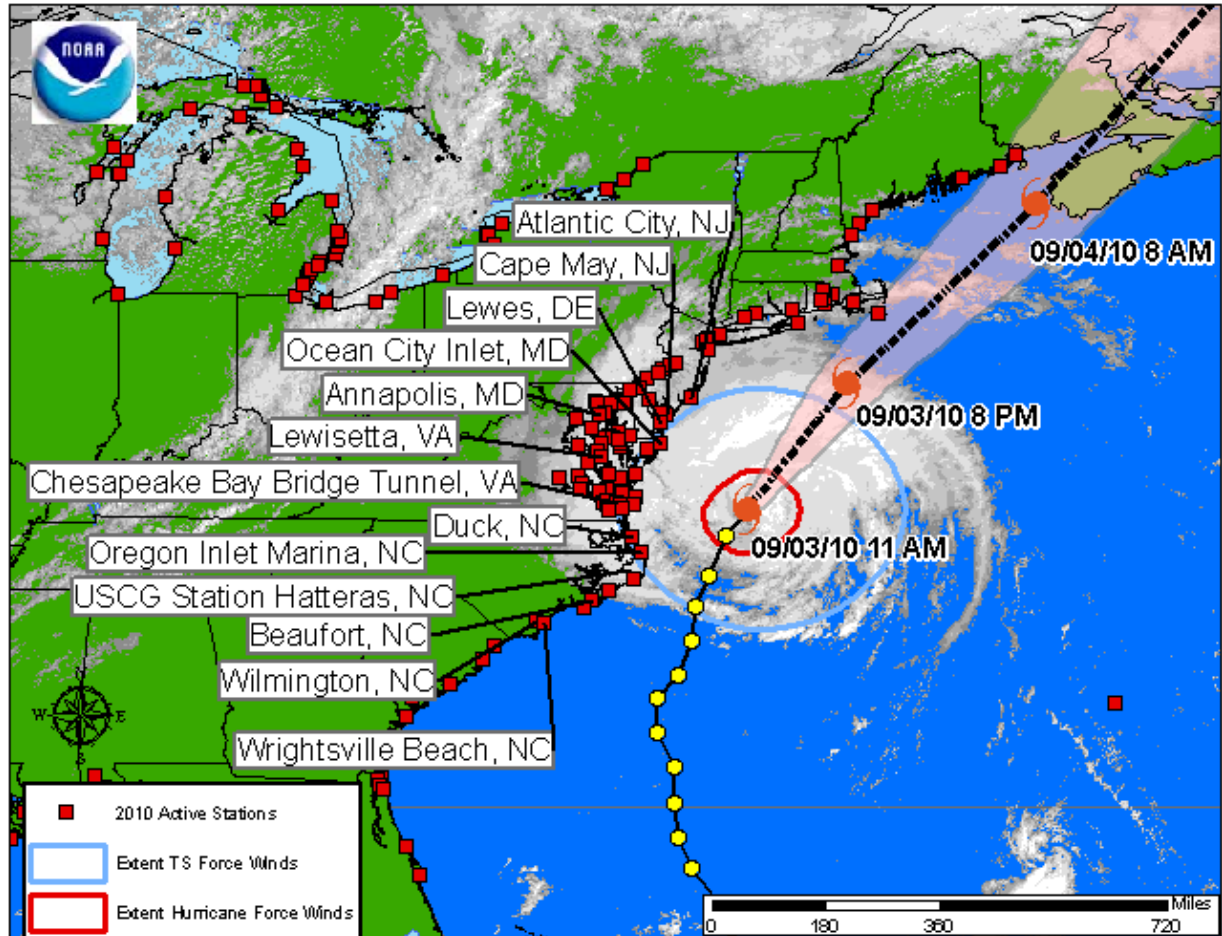




Hurricane EARL QuickLook
Posted: 12:00 EDT 09/03/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/03/2010 12:00 EDT, water levels along the eastern U.S. coastline from North Carolina to New Jersey are 0.5 to 2.3 feet above predicted levels. The highest elevations of 2.2 feet are at present in North Carolina (USCG Station Hatteras and Oregon Inlet Marina). Water levels in Annapolis, MD are only 0.2 feet above predicted. Winds range from 12 to 27 knots along the coast. Maximum wind gusts slowed to 34 knots observed at USCG Station Hatteras, NC and Oregon Inlet Marina, NC. Barometric pressure along the coast started to rise in North Carolina, but it is falling in Virginia northward.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

USCG Station Hatteras, NC Next predicted high tides are 0.51 ft (1.40 m) at 09/03/2010 17:20 EDT and 4.07 ft (1.24 m) at 09/04/2010 06:03 EDT.

OREGON INLET MARINA, NC Next predicted high tides are 1.35 ft (0.41 m) at 09/03/2010 15:59 EDT and 1.13 ft (0.34 m) at 09/04/2010 04:24 EDT.

DUCK, NC Next predicted high tides are 3.82 ft (1.16 m) at 09/03/2010 15:22 EDT and 3.03 ft (0.92 m) at 09/04/2010 03:51 EDT.

CHESAPEAKE BAY BRIDGE TUNNEL, VA Next predicted high tides are 2.98 ft (0.91 m) at 09/03/2010 16:11 EDT and 2.45 ft (0.75 m) at 09/04/2010 04:39 EDT.

LEWISSETTA, VA Next predicted high tides are 1.44 ft (0.44 m) at 09/03/2010 08:54 EDT and 1.65 ft (0.50 m) at 09/03/2010 21:51 EDT.

ANNAPOLIS, MD Next predicted high tides are 1.15 ft (0.35 m) at 09/03/2010 12:16 EDT and 1.73 ft (0.53 m) at 09/04/2010 02:10 EDT.

OCEAN CITY INLET, MD Next predicted high tides are 2.41 ft (0.73 m) at 09/03/2010 16:24 EDT and 1.93 ft (0.59 m) at 09/04/2010 04:25 EDT.

LEWES, DE Next predicted high tides are 4.74 ft (1.44 m) at 09/03/2010 16:42 EDT and 3.65 ft (1.11 m) at 09/04/2010 05:11 EDT.

ATLANTIC CITY, NJ Next predicted high tides are 4.63 ft (1.41 m) at 09/03/2010 15:25 EDT and 3.56 ft (1.09 m) at 09/04/2010 04:04 EDT.

BEAUFORT, NC Next predicted high tides are 3.58 ft (1.09 m) at 09/03/2010 15:57 EDT and 2.92 ft (0.89 m) at 09/04/2010 04:15 EDT.

WILMINGTON, NC Next predicted high tides are 4.59 ft (1.40 m) at 09/03/2010 17:31 EDT and 4.07 ft (1.24 m) at 09/04/2010 06:03 EDT.

WRIGHTSVILLE BEACH, NC Next predicted high tides are 4.49 ft (1.37 m) at 09/03/2010 15:17 EDT and 3.62 ft (1.10 m) at 09/04/2010 03:45 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:KG

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 37

1100 AM EDT FRI SEP 03 2010

...A LARGE BUT WEAKER HURRICANE EARL HEADING FOR SOUTHEASTERN NEW ENGLAND...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

THE HURRICANE WARNING FOR NORTH CAROLINA HAS BEEN DISCONTINUED...AND REPLACED BY A TROPICAL STORM WARNING NORTH OF OCRACOKE.

THE HURRICANE WARNING AREA FOR MASSACHUSETTS HAS BEEN REDUCED.

THE TROPICAL STORM WATCH FOR WESTERN LONG ISLAND AND THE COAST OF CONNECTICUT WEST OF NEW HAVEN HAS BEEN DISCONTINUED.

ALL WATCHES/WARNINGS BETWEEN HULL MASSACHUSETTS AND CAPE ELIZABETH MAINE HAVE BEEN DISCONTINUED.

NUMEROUS CHANGES TO CANADIAN WATCHES AND WARNINGS.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

*** WOODS HOLE EASTWARD AROUND CAPE COD TO SAGAMORE BEACH MASSACHUSETTS... INCLUDING MARTHAS VINEYARD AND NANTUCKET ISLAND**

A HURRICANE WATCH IS IN EFFECT FOR...

*** NOVA SCOTIA FROM ECUM SECUM WESTWARD TO DIGBY**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

*** OCRACOKE NORTH CAROLINA TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT**

*** THE COAST OF LONG ISLAND NEW YORK FROM FIRE ISLAND INLET EASTWARD ON THE SOUTH SHORE AND PORT JEFFERSON HARBOR EASTWARD ON THE NORTH SHORE**

*** NEW HAVEN CONNECTICUT TO WEST OF WOODS HOLE MASSACHUSETTS... INCLUDING BLOCK ISLAND**

*** NORTH OF SAGAMORE BEACH TO HULL MASSACHUSETTS**

*** STONINGTON MAINE TO EASTPORT MAINE**

*** THE COAST OF NOVA SCOTIA FROM FORT LAWRENCE SOUTHWARD AND EASTWARD TO ECUM SECUM**

- * TIDNISH TO LISMORE
- * PRINCE EDWARD ISLAND

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * CAPE ELIZABETH TO WEST OF STONINGTON MAINE
- * NEW BRUNSWICK FROM THE U.S./CANADA BORDER EASTWARD TO FORT LAWRENCE
- * NOVA SCOTIA FROM ECUM SECUM NORTHEASTWARD TO LISMORE
- * THE MAGDALEN ISLANDS

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES... INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM EDT THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE 36.8 NORTH...LONGITUDE 73.1 WEST. EARL IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 21 MPH. AN INCREASE IN FORWARD SPEED AND A TURN TOWARD THE NORTHEAST ARE EXPECTED IN THE NEXT 12 TO 24 HOURS. ON THE FORECAST TRACK...THE CENTER OF EARL WILL CONTINUE TO MOVE AWAY FROM THE NORTH CAROLINA OUTER BANKS TODAY...AND APPROACH SOUTHEASTERN NEW ENGLAND TONIGHT.

MAXIMUM SUSTAINED WINDS HAVE DECREASED TO NEAR 85 MPH...WITH HIGHER GUSTS. EARL IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON SCALE. WEAKENING IS FORECAST...BUT EARL IS EXPECTED REMAIN A LARGE HURRICANE AS IT APPROACHES SOUTHEASTERN NEW ENGLAND.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 70 MILES...FROM THE CENTER... AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 205 MILES.

LATEST MINIMUM CENTRAL PRESSURE REPORTED BY AN AIR FORCE PLANE WAS 961 MB.

HAZARDS AFFECTING LAND

WINDS...TROPICAL-STORM-FORCE WINDS ARE STILL OCCURRING ALONG PORTIONS OF THE NORTH CAROLINA COAST WITHIN THE WARNING AREA BUT ARE EXPECTED TO GRADUALLY DIMINISH LATER TODAY. TROPICAL-STORM-FORCE WINDS WILL LIKELY CONTINUE ALONG THE COAST FROM VIRGINIA NORTHWARD AND REACH SOUTHEASTERN NEW ENGLAND LATER TODAY...AND SPREAD OVER THE COAST OF MAINE WITHIN THE WARNING AREA TONIGHT. HURRICANE CONDITIONS ARE EXPECTED WITHIN THE HURRICANE WARNING AREA IN SOUTHEASTERN MASSACHUSETTS TONIGHT AND SATURDAY MORNING.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL WITHIN THE TROPICAL STORM WARNING AREA OVER NORTH CAROLINA...AS WELL AS IN THE LOWER CHESAPEAKE BAY. STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA OVER MASSACHUSETTS. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

RAINFALL...EARL IS EXPECTED TO PRODUCE AN ADDITIONAL INCH OR SO OF RAINFALL...WITH ISOLATED STORM TOTALS OF 5 INCHES OVER PORTIONS OF EASTERN NORTH CAROLINA INCLUDING THE OUTER BANKS. ACCUMULATIONS OF 1 TO 3 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 5 INCHES...ARE POSSIBLE OVER SOUTHEASTERN NEW ENGLAND. ACCUMULATIONS OF 1 TO 2 INCHES ARE POSSIBLE OVER COASTAL PORTIONS OF VIRGINIA...MARYLAND AND DELAWARE AND ALSO ACROSS CENTRAL AND COASTAL MAINE.

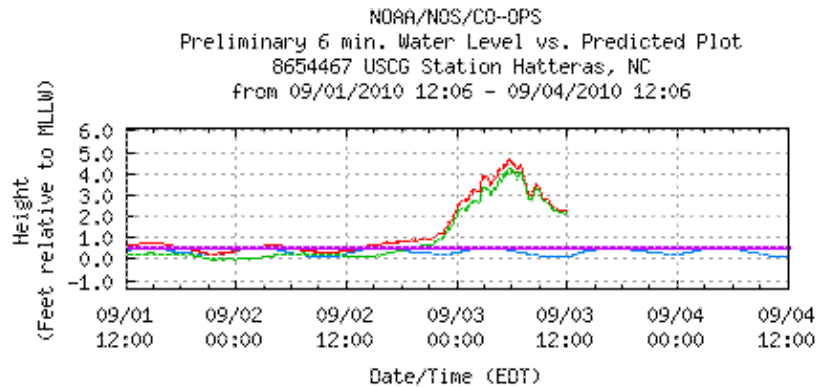
SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE EAST COAST OF THE UNITED STATES TODAY. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

FORECASTER AVILA

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [USCG Station Hatteras - Barometric](#), [USCG Station Hatteras - Air/Water Temp](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Oregon Inlet Marina - Barometric](#), [Oregon Inlet Marina - Air/Water Temp](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Chesapeake Bay Bridge Tunnel - Barometric](#), [Chesapeake Bay Bridge Tunnel - Air/Water Temp](#), [Lewisetta - Water Level](#), [Lewisetta - Winds](#), [Lewisetta - Barometric](#), [Lewisetta - Air/Water Temp](#), [Annapolis - Water Level](#), [Annapolis - Barometric](#), [Ocean City Inlet - Water Level](#), [Ocean City Inlet - Winds](#), [Ocean City Inlet - Barometric](#), [Ocean City Inlet - Air/Water Temp](#), [Lewes - Water Level](#), [Lewes - Winds](#), [Lewes - Barometric](#), [Cape May - Water Level](#), [Cape May - Winds](#), [Cape May - Barometric](#), [Cape May - Air/Water Temp](#), [Atlantic City - Water Level](#), [Atlantic City - Barometric](#), [Atlantic City - Air/Water Temp](#).

USCG Station Hatteras, NC - [Return to List](#)

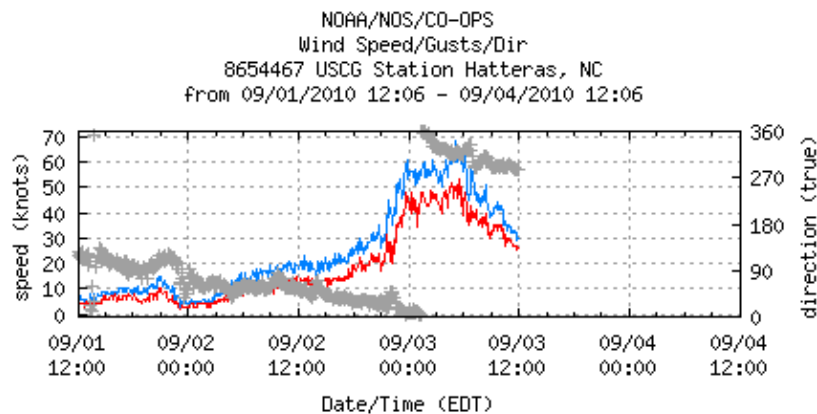


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 2.29 ft. Predicted: 0.11 ft. Residual: 2.18 ft.**

Historical Maximum Water Level: , 0 ft. above **MHHW**

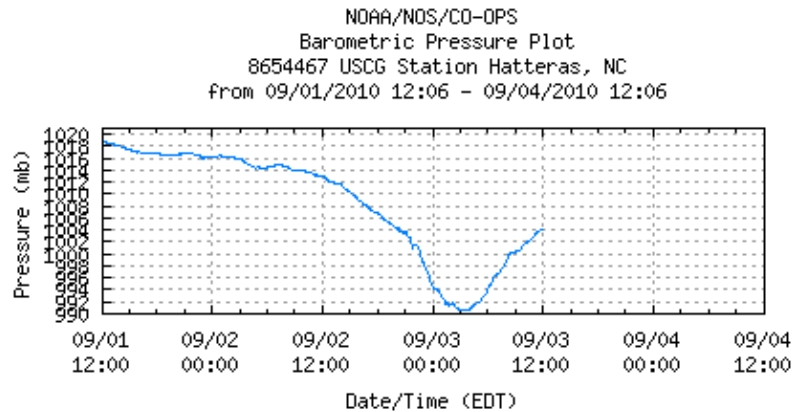
USCG Station Hatteras, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 26 knots Gusts: 30 knots Direction: 284° T

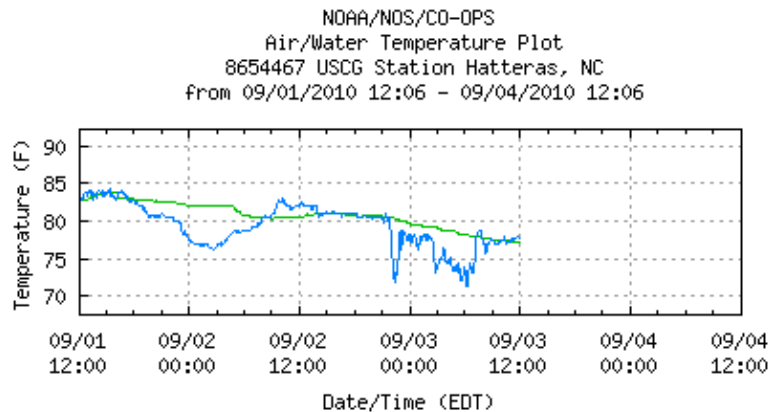
USCG Station Hatteras, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1004.1 mb

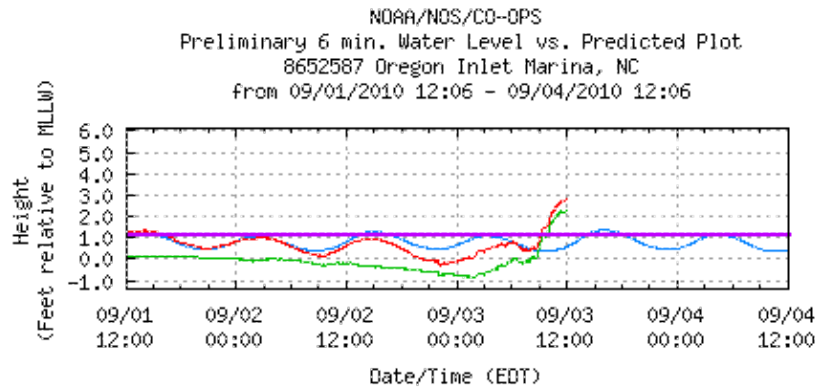
USCG Station Hatteras, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 77.2° F Air Temperature: 77.7° F

Oregon Inlet Marina, NC - [Return to List](#)

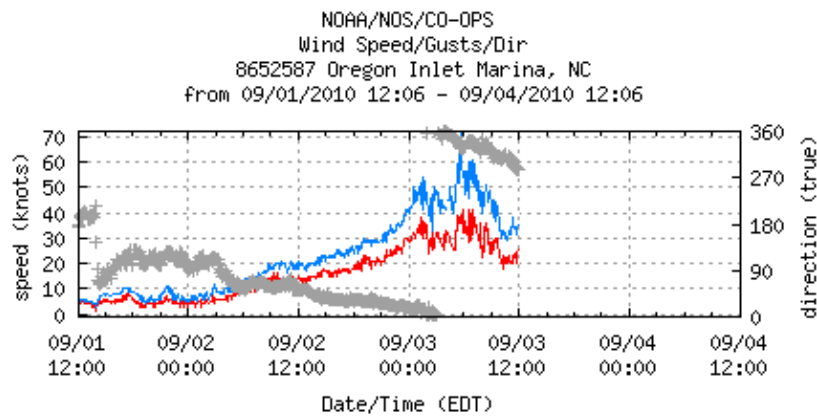


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 2.81 ft.** **Predicted: 0.56 ft.** **Residual: 2.25 ft.**

Historical Maximum Water Level: Sep 16 1999, 4.49 ft. above **MHHW**

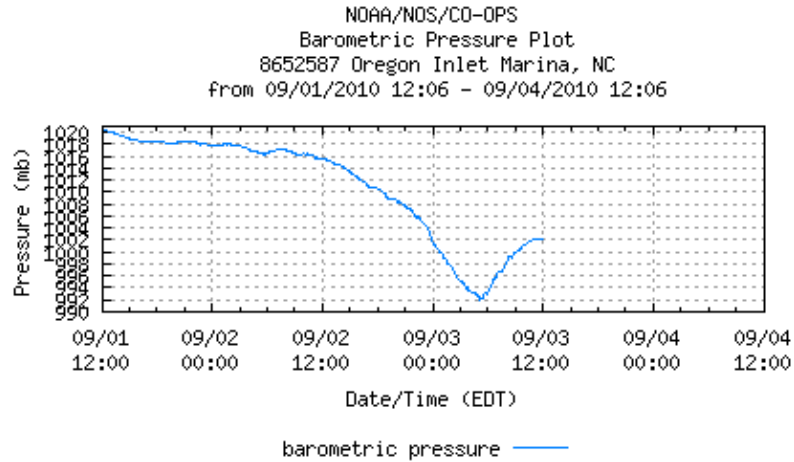
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 25 knots **Gusts: 35 knots** **Direction: 286° T**

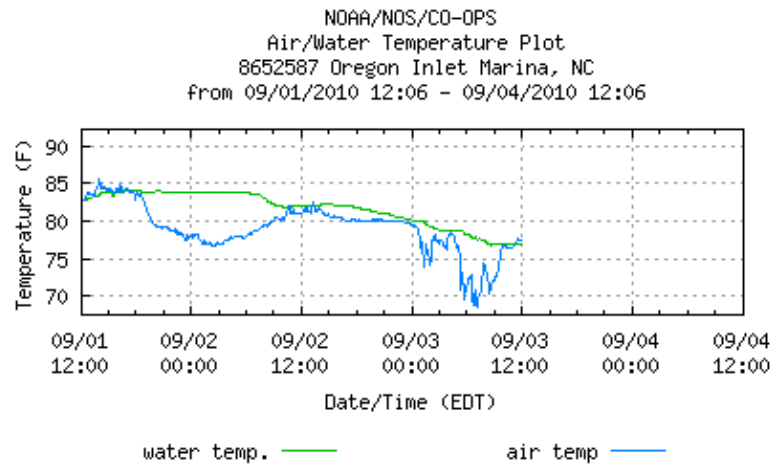
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1002.2 mb

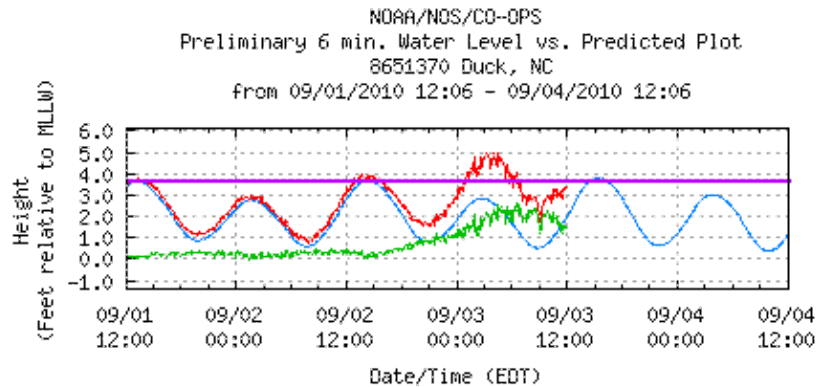
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 76.8° F Air Temperature: 77.4° F

Duck, NC - [Return to List](#)

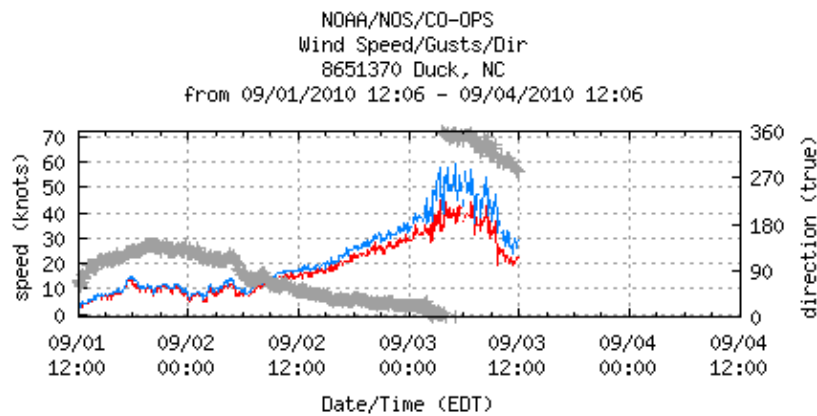


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 3.38 ft. Predicted: 1.92 ft. Residual: 1.46 ft.**

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above **MHHW**

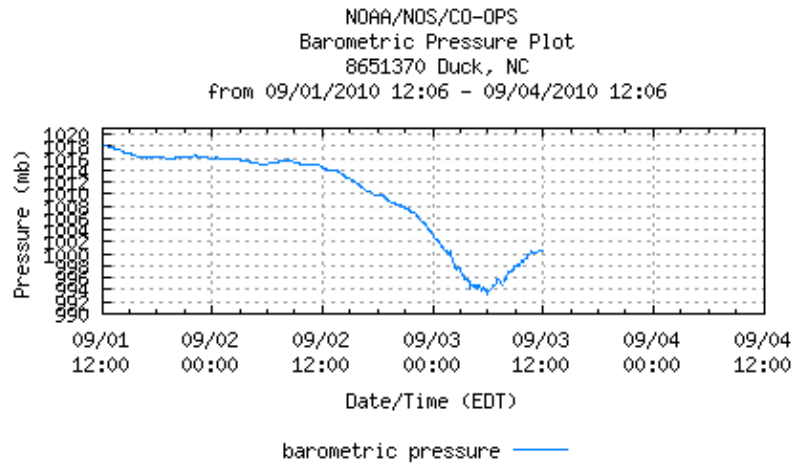
Duck, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 22 knots Gusts: 29 knots Direction: 283° T

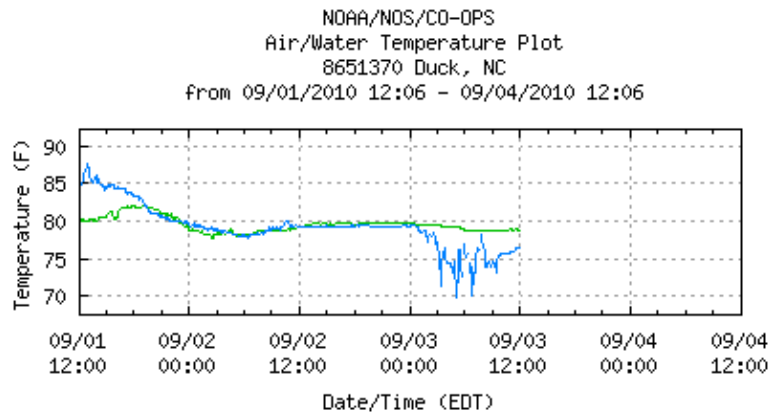
Duck, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1000.7 mb

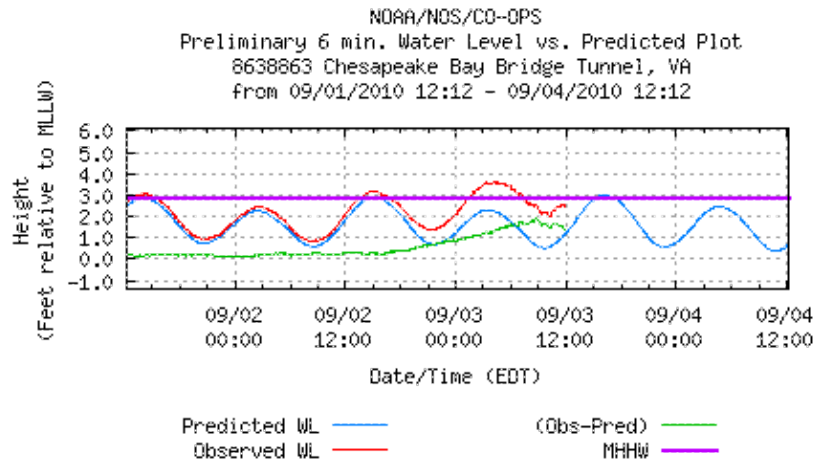
Duck, NC - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 78.8° F Air Temperature: 76.5° F

Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)

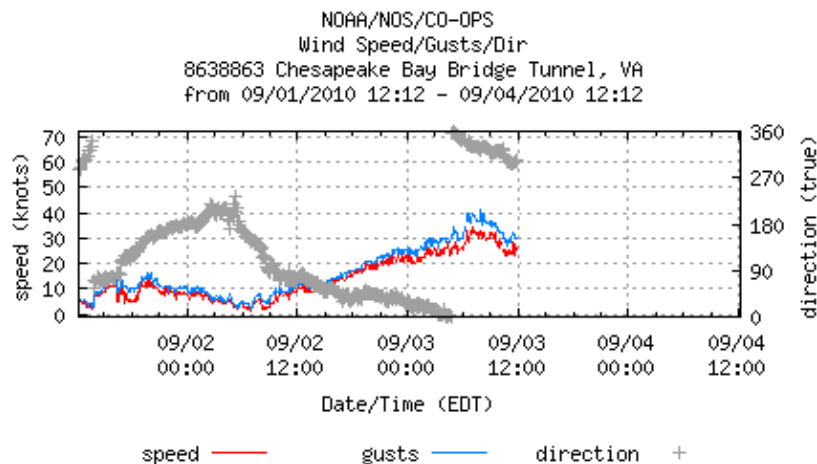


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 2.57 ft.** **Predicted: 1.16 ft.** **Residual: 1.41 ft.**

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above **MHHW**

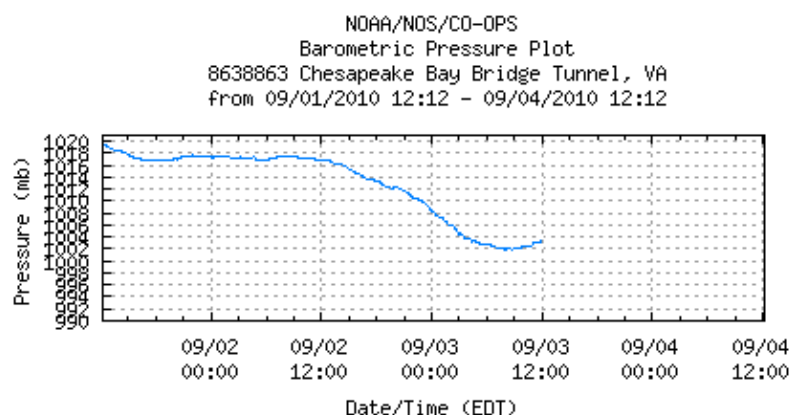
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 26 knots **Gusts: 30 knots** **Direction: 299° T**

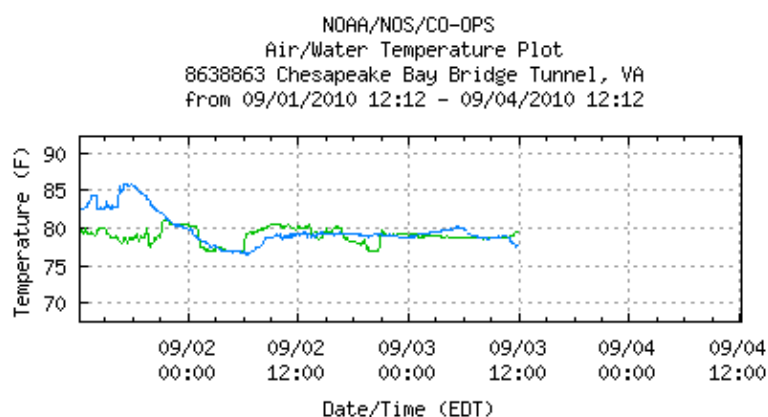
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1003.3 mb

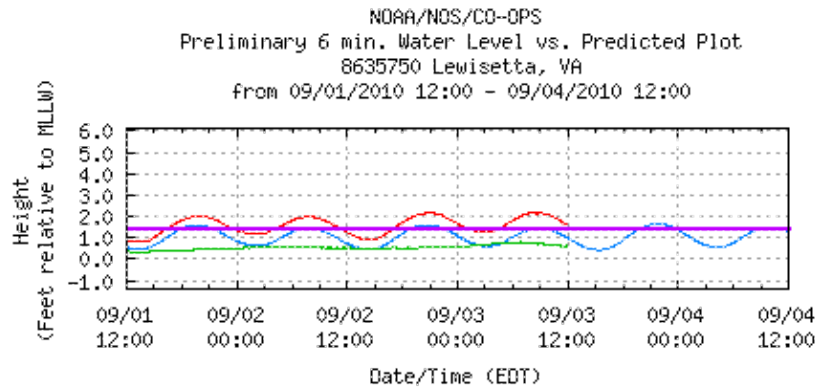
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 79.5° F Air Temperature: 77.7° F

Lewisetta, VA - [Return to List](#)

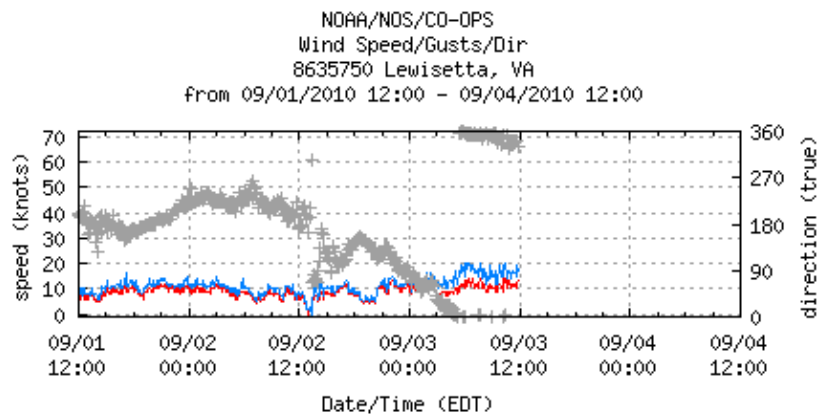


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 1.62 ft. Predicted: 1.00 ft. Residual: 0.62 ft.**

Historical Maximum Water Level: Feb 5 1998, 2.33 ft. above **MHHW**

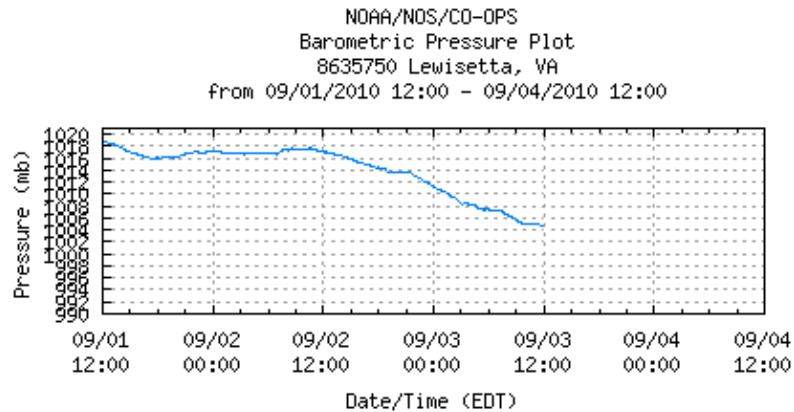
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:48 (EDT)

Wind Speed: 13 knots Gusts: 17 knots Direction: 331° T

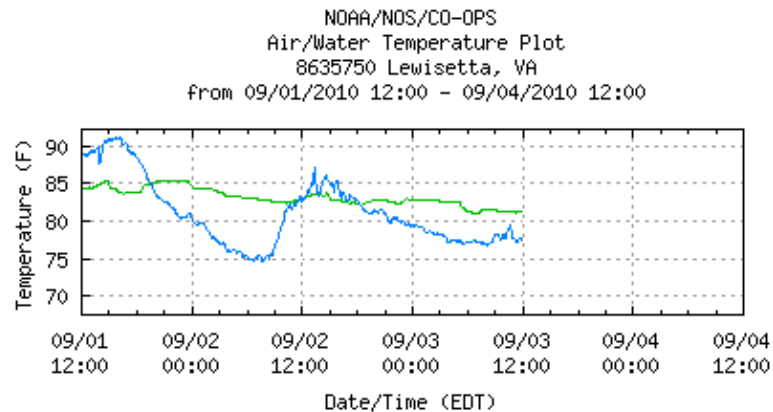
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:48 (EDT)

Barometric Pressure: 1004.7 mb

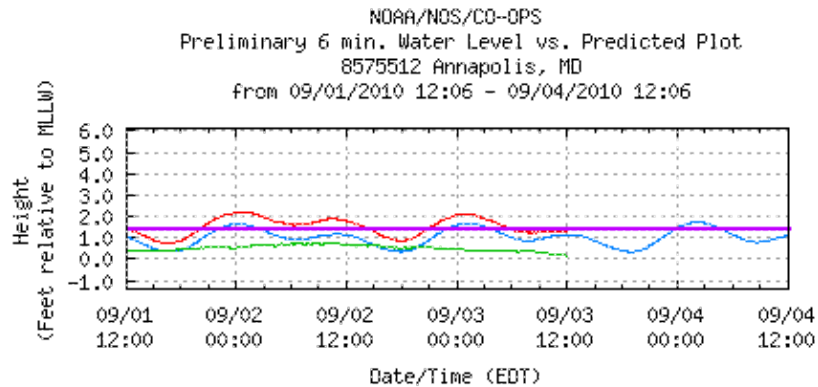
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 81.2° F Air Temperature: 77.4° F

Annapolis, MD - [Return to List](#)

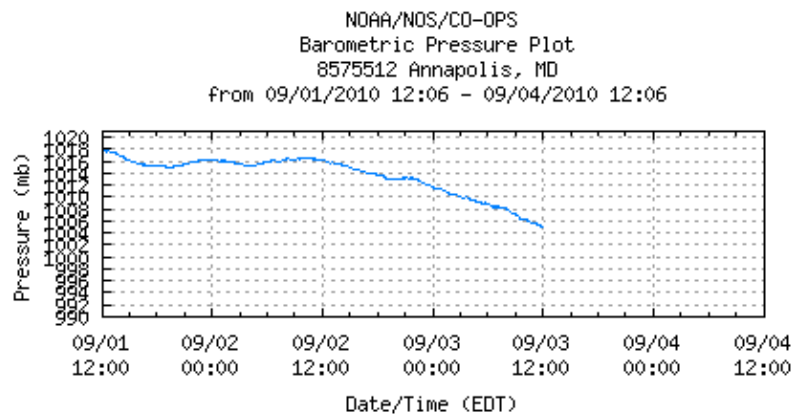


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 1.29 ft. Predicted: 1.14 ft. Residual: 0.15 ft.**

Historical Maximum Water Level: Aug 23 1933, 4.74 ft. above **MHHW**

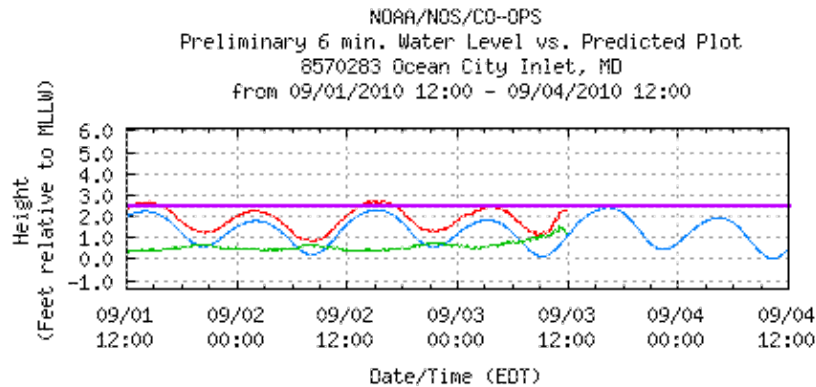
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1005.0 mb

Ocean City Inlet, MD - [Return to List](#)

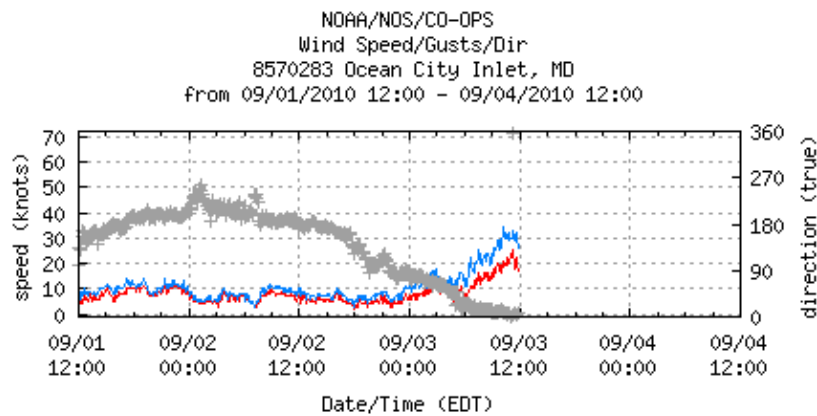


Last Observed Sample: 09/03/2010 11:48 (EDT)

Relative to **MLLW**: **Observed: 2.24 ft. Predicted: 1.01 ft. Residual: 1.23 ft.**

Historical Maximum Water Level: Feb 5 1998, 3.6 ft. above **MHHW**

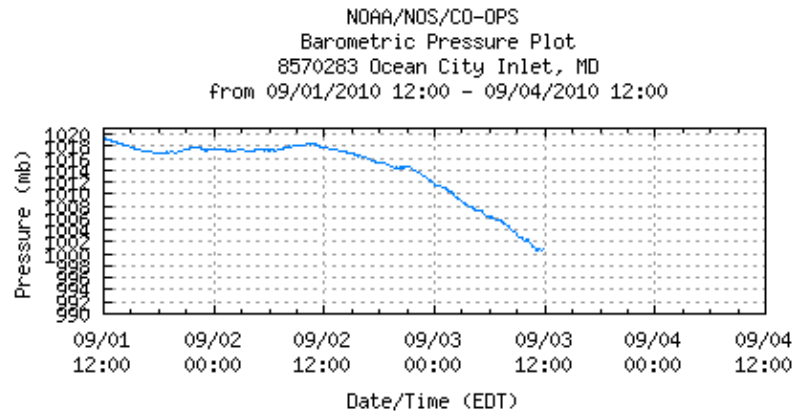
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 11:48 (EDT)

Wind Speed: 17 knots Gusts: 26 knots Direction: 009° T

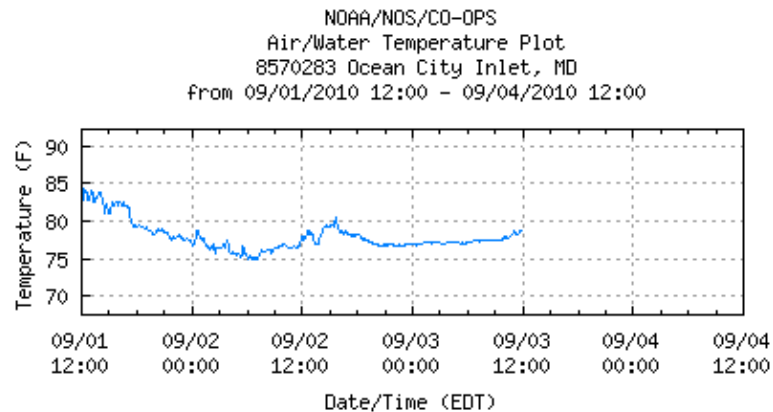
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 11:48 (EDT)

Barometric Pressure: 1000.9 mb

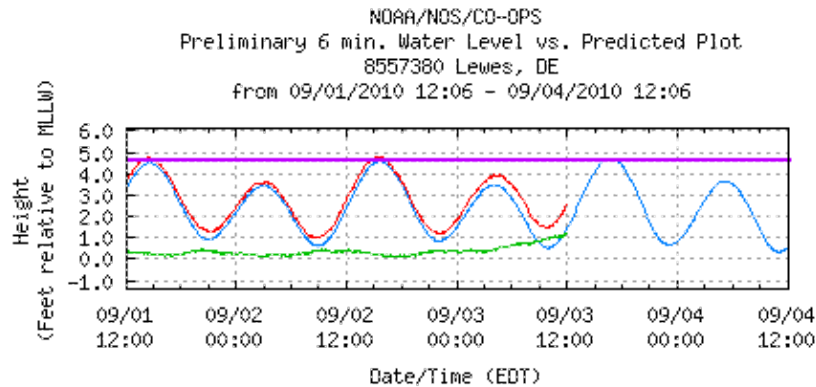
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/03/2010 11:48 (EDT)

Water Temperature: n/a Air Temperature: 78.6° F

Lewes, DE - [Return to List](#)

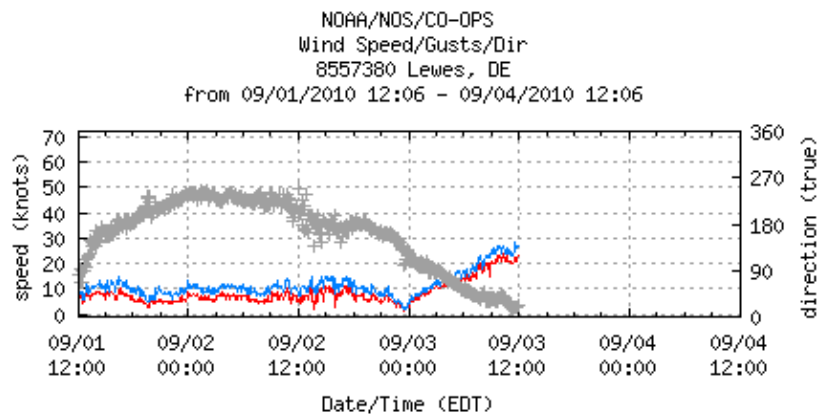


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 2.55 ft. Predicted: 1.36 ft. Residual: 1.19 ft.**

Historical Maximum Water Level: Mar 6 1962, 4.57 ft. above **MHHW**

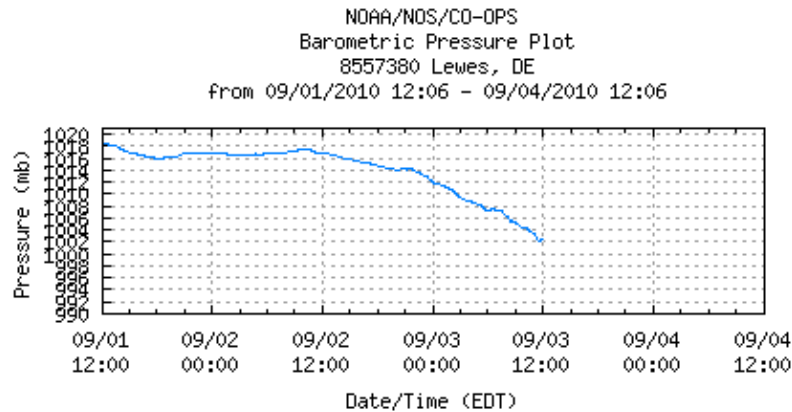
Lewes, DE - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 23 knots Gusts: 27 knots Direction: 021° T

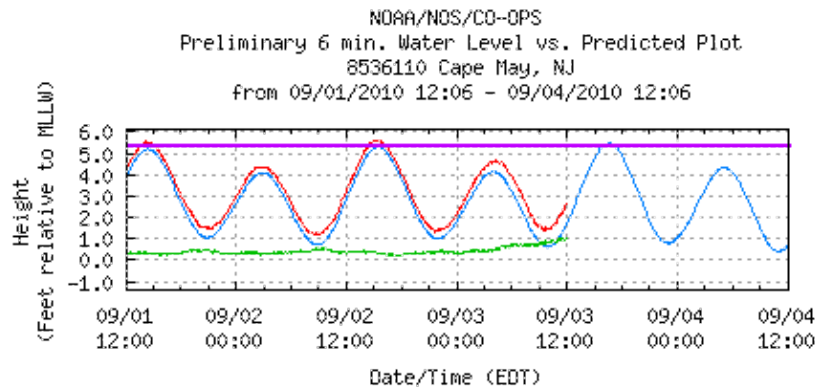
Lewes, DE - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1002.6 mb

Cape May, NJ - [Return to List](#)

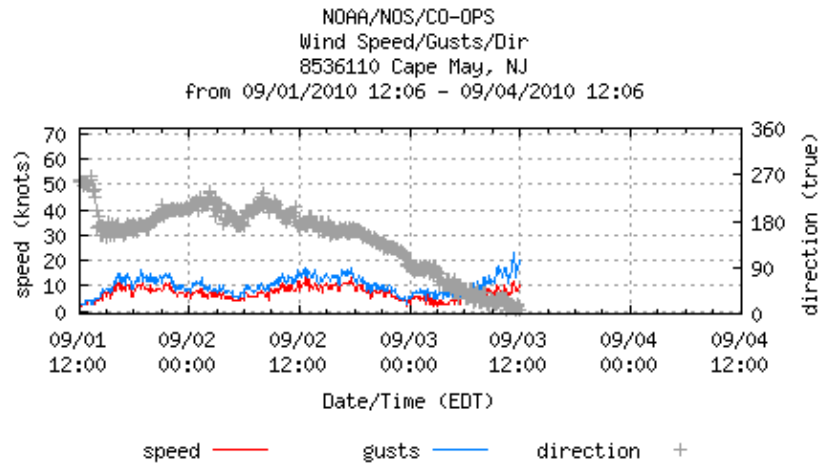


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: **Observed: 2.67 ft.** **Predicted: 1.64 ft.** **Residual: 1.03 ft.**

Historical Maximum Water Level: Sep 27 1985, 3.36 ft. above **MHHW**

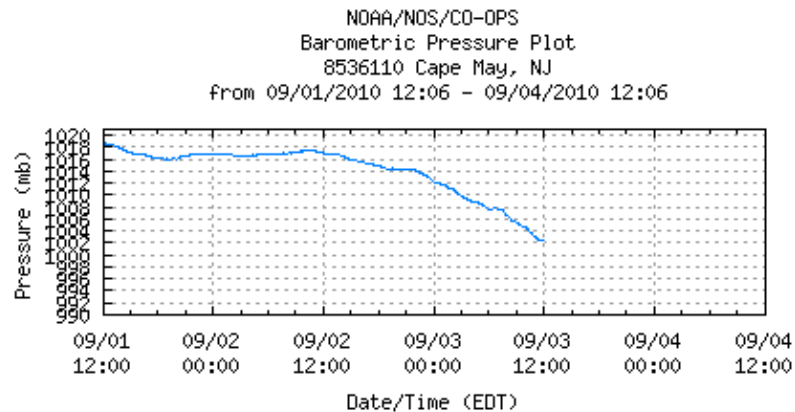
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Wind Speed: 10 knots Gusts: 20 knots Direction: 006° T

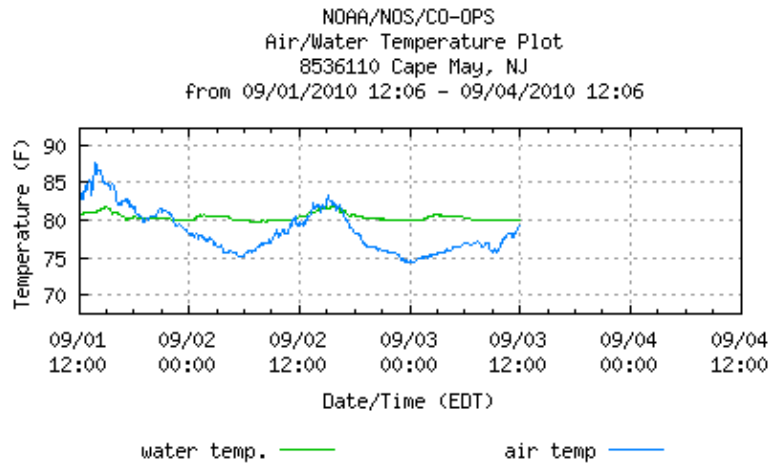
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1002.4 mb

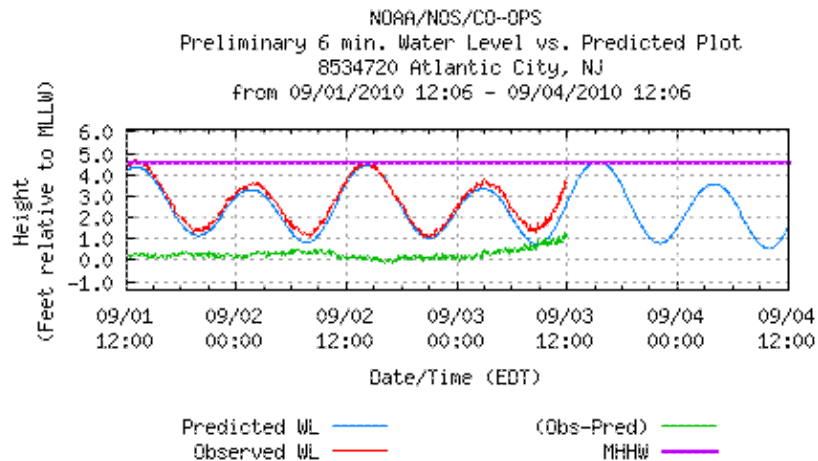
Cape May, NJ - [Return to List](#)



Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 80.1° F Air Temperature: 79.2° F

Atlantic City, NJ - [Return to List](#)

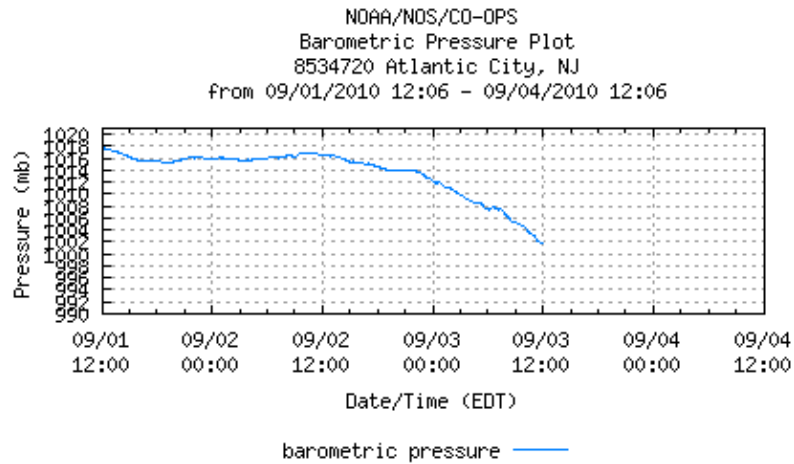


Last Observed Sample: 09/03/2010 11:54 (EDT)

Relative to **MLLW**: Observed: 3.65 ft. Predicted: 2.58 ft. Residual: 1.07 ft.

Historical Maximum Water Level: Dec 11 1992, 4.38 ft. above **MHHW**

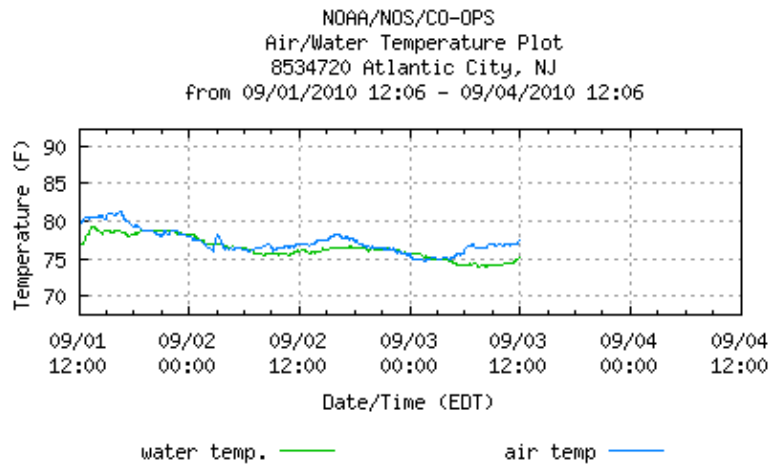
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Last Observed Sample: 09/03/2010 11:54 (EDT)

Barometric Pressure: 1001.8 mb

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Last Observed Sample: 09/03/2010 11:54 (EDT)

Water Temperature: 75.2° F Air Temperature: 77.4° F

Hurricane EARL QuickLook, POSTED 12:00 EDT 09/03/2010

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce